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Patent
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(21906-702)TO THE CLAIMS

Please cancel claims 14, 20, 27, 28, and 36, rewrite claims 16, 21, 32, and 37, and amend claims 15, 17-19, 22, 26, 29-31, 33-35, and 42-44, as follows. A complete listing of the claims is provided below.

1. (Previously Presented) A method of monitoring a network switch having a plurality of regular ports between which network traffic data packets are forwarded and an external mirror port, comprising:

selecting at least one of said regular ports;

mirroring a data packet of said selected port to said external mirror port;

extracting the network address information of said mirrored data packet;

determining port information of said network address information in response to said network address information extraction; and

performing network analysis of said network switch.

2. (Previously Presented) The method of claim 1, wherein said port information comprises physical information.

3. (Previously Presented) The method of claim 1, wherein said port information determination comprises interrogating said network switch to obtain said port information using said network address information.

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4. (Previously Presented) The method of claim 3, wherein said interrogation comprises:
sending a first request to said network switch requesting a port index corresponding to said network address information; and
sending a second request to said network switch requesting said port information corresponding to said port index.
5. (Previously Presented) The method of claim 1, wherein said network address information extraction and said port information determination are performed in an external monitor device.
6. (Cancelled).
7. (Previously Presented) The method of claim 4, wherein said port information determination comprises placing said mirrored data packet in a first-in-first-out buffer waiting for responses from said network switch.
8. (Previously Presented) The method of claim 7, wherein said port information determination further comprises releasing said mirrored data packet from said first-in-first-out buffer after said network switch responds to said requests.
9. (Previously Presented) The method of claim 7, wherein said port information determination further comprises releasing said mirrored data packet from said first-in-first-out buffer after a predetermined period of time.

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10. (Previously Presented) The method of claim 1, further comprising maintaining at least one lookup table correlating said network address information with said port information.

11. (Previously Presented) The method of claim 1, wherein said network address information comprises a source address of said mirrored data packet.

12. (Previously Presented) The method of claim 1, wherein said network address information comprises a destination address of said mirrored data packet.

13. (Previously Presented) The method of claim 1, wherein said network switch is a routing switch.

14. (Canceled)

15. (Currently Amended) The method of claim ~~14~~ 16, wherein said port information comprises physical information.

16. (Currently Amended) ~~The method of claim 14,~~ A method to monitor a network switch, comprising:

externally obtaining at least a portion of data packets transmitted from said network switch,

wherein each of said data packets comprises network address information;

extracting said network address information from said obtained portion of data packets;

determining port information of said network address information in response to said network address information extraction; and

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performing network analysis of said network switch using said port information;

wherein said network switch comprises a plurality of regular ports and a mirror port, said mirror port being able to mirror network traffic for at least one of said regular ports, wherein said portion of data packets are obtained from said mirror port.

17. (Currently Amended) The method of claim ~~14~~ 16, wherein said network address information comprises source addresses.

18. (Currently Amended) The method of claim ~~14~~ 16, wherein said network address information comprises destination addresses.

19. (Currently Amended) The method of claim ~~14~~ 16, wherein said network switch comprises a plurality of regular ports, wherein said portion of data packets are obtained by passively tapping at least one of said regular ports.

20. (Canceled)

21. (Currently Amended) ~~The method of claim 20, A method to monitor a network switch, comprising:~~

externally obtaining at least a portion of data packets transmitted from said network switch,

wherein each of said data packets comprises network address information;

extracting said network address information from said obtained portion of data packets;

determining port information of said network address information in response to said network address information extraction; and

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performing network analysis of said network switch using said port information;
wherein said port information determination comprises interrogating said network switch
to obtain said port information using said network address information; and
wherein said interrogation comprises:
sending a first request to said network switch requesting a port index corresponding to said
network address information; and
sending a second request to said network switch requesting said port information
corresponding to said port index.

22. (Currently Amended) The method of claim 14 16, wherein said network address
information extraction and said port information determination are performed in an external
monitor device.

23. (Previously Presented) The method of claim 21, wherein said port information
determination comprises placing said obtained portion of data packets in a first-in-first-out buffer
waiting for responses from said network switch.

24. (Previously Presented) The method of claim 23, wherein said port information
determination further comprises releasing a data packet from said first-in-first-out buffer after said
network switch responds to said first and second requests.

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25. (Previously Presented) The method of claim 23, wherein said port information determination further comprises releasing a data packet from said first-in-first-out buffer after a predetermined period of time.
26. (Currently Amended) The method of claim ~~14~~ 16, further comprising maintaining at least one lookup table correlating said network address information with said port information.
27. (Canceled)
28. (Canceled)
29. (Currently Amended) The method of claim ~~28~~ 32, further comprising performing network analysis of said network switch using said port information.
30. (Currently Amended) The method of claim ~~28~~ 32, wherein said port information comprises physical information.
31. (Currently Amended) The method of claim ~~28~~ 32, wherein said network address information extraction and said port information determination is performed in an external monitoring device.
32. (Currently Amended) ~~The method of claim 28,~~ A method to monitor a network switch, comprising:
externally obtaining at least a portion of data packets transmitted from said network switch,
wherein each of said data packets comprises network address information;

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extracting said network address information from said obtained portion of data packets;
and

determining port information of said network address information in response to said
network address information extraction;

wherein said network switch comprises a plurality of regular ports and a mirror port, said mirror port being able to mirror network traffic for at least one of said regular ports, wherein said portion of data packets are obtained from said mirror port.

33. (Currently Amended) The method of claim ~~28~~ 32, wherein said network address information comprises source addresses.

34. (Currently Amended) The method of claim ~~28~~ 32, wherein said network address information comprises destination addresses.

35. (Currently Amended) The method of claim ~~28~~ 32, wherein said network switch comprises a plurality of regular ports, wherein said portion of data packets are obtained by passively tapping at least one of said regular ports.

36. (Canceled)

37. (Currently Amended) ~~The method of claim 36,~~ A method to monitor a network switch, comprising:

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externally obtaining at least a portion of data packets transmitted from said network switch,
wherein each of said data packets comprises network address information:

extracting said network address information from said obtained portion of data packets;

and

determining port information of said network address information in response to said
network address information extraction:

wherein said port information determination comprises interrogating said network switch
to obtain said portion of port information using said network address information; and

wherein said interrogation comprises:

sending a first request to said network switch requesting a port index corresponding to said
network address information; and

sending a second request to said network switch requesting said port information
corresponding to said port index.

38. (Previously Presented) The method of claim 37, wherein said first request and said
second request are SNMP requests.

39. (Previously Presented) The method of claim 37, wherein said port information
determination comprises placing said obtained portion of data packets in a first-in-first-out buffer
waiting for responses from said network switch.

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40. (Previously Presented) The method of claim 39, wherein said port information determination further comprises releasing a data packet from said first-in-first-out buffer after said network switch responds to said first and second requests.

41. (Previously Presented) The method of claim 39, wherein said port information determination further comprises releasing a data packet from said first-in-first-out buffer after a predetermined period of time.

42. (Currently Amended) The method of claim ~~28~~32, further comprising maintaining at least one lookup table correlating said network address information with said port information.

43. (Currently Amended) The method of claim ~~28~~32, wherein said network switch is a routing switch.

44. (Currently Amended) The method of claim ~~28~~32, further comprising associating said port information with information contained in said obtained portion of data packets.

45. (Previously Presented) The method of claim 44, further comprising performing network analysis of said network switch using said port information and associated data packet information.